The Capitol Hill Monitor

Volume 7 Issue 1 (2001) August 2001

CHARLES COUNTY ORDERS TRUNKED RADIO SYSTEM

by Alan Henney (alan@henney.com)

Charles County -- one of the fastest growing counties in the state -- has issued a request for proposals for a trunked radio system. Complaints about the county's existing radio systems include dead spots in the western and southern areas of the county, chronic interference from nearby school districts, and aging equipment.

Charles County seeks to lease or purchase an 800 MHz mixed analog/digital trunked system. The system will provide emergency call, private call, call alert, telephone interconnect, unit identification, and encryption. The system architecture will be compliant with the Association of Public-Safety Communications Officials (APCO) Project 16 standards for public safety trunked radio systems.

Although not a requirement, the county desires the trunked system to conform with the objectives of APCO Project 25 in terms of digital modulation; interoperability with equipment from other manufacturers; ability to support at least two simultaneous messages within a single 25 KHz channel assignment through either FDMA or TDMA technology; 9600 BPS working and control channel speed; ability to support Improved Multiband Excitation (IMBE) vocoder; advanced digital encryption such as DES; superior audio clarity through advanced error correction; data interface for MDTs; and ability to expand and grow.

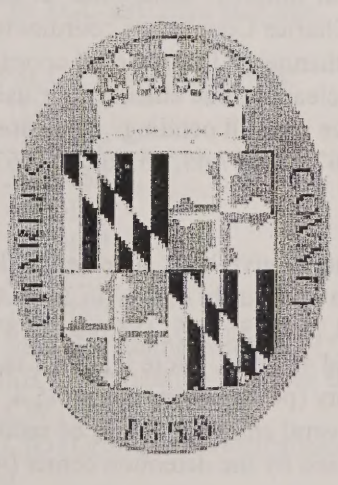
The county seeks a system that can be cost-effectively modified to accommodate mobile data and vehicle locator systems (AVL) in the future.

The project will include: the installation of a digital-loop microwave system to connect the antenna sites; furnishing and installing remote site and monitoring and control systems; communications center equipment; system controller and audio switch; mobiles, portables and control stations; a fire station alerting sub-system; and integration of the new system with certain existing subsystems.

The proposed system will be an eight-channel GPS-synchronized analog/digital network with a minimum of eight transmit sites. Interconnection between the transmit sites, console electronics and dispatch positions will be provided via a 6 GHz digital-loop microwave system that will provide capacity for other applications. Currently, existing sites are connected by two-wire and four-wire tone-activated remote control which the county intends to eliminate.

RF coverage computer predictions suggest that at least eight base station sites are needed to minimally meet the coverage objectives. The county has tentatively selected several sites. These locations are subject to change, but include: Nanjemoy, Pisgah Recycling Center, Strawberry Hills, county landfill, animal shelter, Glasva and the Breeze Farm.

Existing communications towers used by the county are at the animal shelter, LaPlata sheriff's headquarters, Breeze Farm, Pisgah Recycling Center, county landfill, Nanjemoy, and on Radio Station Road at the former Army receiving station (PSCC dispatch center site). Proposed tower locations include the Glasva School and Strawberry Hills. Eight water tank/tower structures are also available if needed.



The county wants 95 percent reliable portable coverage (in-street with a portable radio worn on the hip). The system is supposed to provide 95 percent contour reliability

portable coverage within all buildings within the service area with 15 dB loss characteristics. In addition, buildings identified as "critical coverage buildings" require 95 percent portable coverage regardless of the building loss.

All existing county radio users are anticipated to migrate to the new system. So far, a total of 25 talkgroups have been identified. The proposed analog agencies are fire/EMS, Van Go, Building & Trade, Utilities Field Ops, meter readers, Growth Management, Zoning Management, Water & Waste, and Utilities Office.

The only planned digital users are animal control, and the sheriff, including the sheriff's road patrol, corrections and deputies assigned to the LaPlata headquarters.

The proposal calls for 267 analog mobiles, 250 digital mobiles, 379 analog portables and 249 digital portables. All digital radios, and only digital radios, will provide encryption too.

"Spectrum efficiency," states the 138-page proposal, "is not the highest priority to the county, and it is a tertiary issue overshadowed by interoperability, audio quality and multiple equipment source concerns."

The county seeks "some level of interoperability" with other nearby public safety systems using similar technology. In addition, the five 866-869 MHz mutual aid channels will be installed at each base site but will not operate in a simulcast manner. A couple conventional simplex "talkaround" channels are also planned. Charles County has coordinated eight 866-869 MHz channels. The regional coordination committee has cleared three channels for use and the remaining five are still pending. They are: 866.325, 866.625, 867.05, 867.45, 868.65, 868.675, 868.9 and 868.925

In the county's "give-back statement," the county promises to relinquish: 45.14, 46.1, 46.42, 46.54, 155.61/154.755, 155.535, 155.64/154.875, 155.67, 453.725 and 453.625. Note that 46.1 is not licensed to the county (perhaps they meant 45.4, 45.64 or 46.36). Several channels would be retained, including those used by the detention center (453.425 and 453.65).

The county plans to continue to use 158.775 for fire/EMS paging and alerting. But the existing system will be replaced with a new VHF simulcast paging network on the same frequency.

The almost one-inch-thick proposal states that the existing VHF Statewide Interdepartmental Radio System (SIRS), the statewide mutual aid, and two EMS HEAR channels will be maintained in an operational status for the immediate future. Those frequencies are not listed, and may possibly be referencing the common Virginia radio nets by those names.

The county anticipates the trunked system project to be completed with the new public safety communications center (PSCC) in August, 2002. The center is in its early development stages. The PSCC will be on Audie Lane in LaPlata and will house the trunked system controller, 9-1-1 call-takers, dispatchers for fire/EMS, sheriff and animal control, 9-1-1 addressing, false-alarm reduction unit, and provide room for paid EMS personnel. Trunked system installation must be completed in accordance with the construction schedule for the county's new PSCC building, but no later than September, 2003.

In May, prospective bidders toured the county's 9-1-1 Center, tower sites and key buildings. Mobile radio installation will not begin until the main site and console electronics are installed and operational.

Proposals were initially due in late July, but that date may be extended a few weeks. The tentative date for awarding the contract is Oct. 30. The date to have fixed-end equipment fully installed and operational is April 1 of next year, with mobiles and portables slated for Sept. 2. The project completion date is targeted for Oct. 30.

Special thanks to Frederick Cox for his assistance with this article.

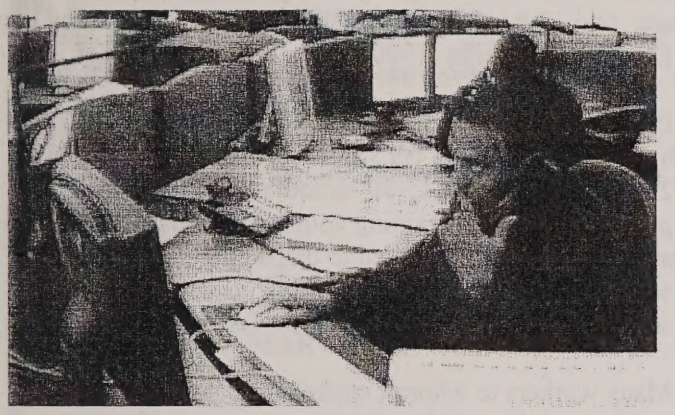
COMBINED 9-1-1 CENTER FOR D.C., AT LAST!

by John Korman (pageme@qwestinternet.net)

Located at 310 McMillan Drive NW, the Metropolitan Police Department along with the D.C. Fire/EMS Department, unveiled the city's new combined Public Safety Communications Center (PSCC) to the media and D.C. executives on July 12. Deputy Mayor Margret Kellems made her welcoming remarks to the attendees. Mayor Anthony Williams, Congresswoman Eleanor Holmes Norton, MPD Chief Charles Ramsey, DCFD Chief

Ronnie Few, and planning committee members also spoke.

The District's PSCC brings together, for the first time in the same facility, all call-taking and dispatch functions of the Metropolitan Police Department and the D.C. Fire and EMS Department. In the past, the two departments operated from separate communications centers with different telephone and computer-aided dispatch (CAD) systems. Now working in the same facility, using the same technology, coordination is enhanced as well as customer service.



As you enter McMillan Drive off Fourth Street NW, you must state your reason for being there to the Hawk One special police officer. Graveled parking lots are on the right side with MedSTAR and Children's Hospital on the left, just beyond the McMillan Reservoir. The PSCC building is seen first, with the old fire communications center farther down. The new building is secure, as if in "lock down." Special police officers using Nextel phones patrol throughout while one monitors cameras strategically positioned in the hallways and stairwells. Each door is only accessible by a special magnetic card, known as a "PDI."

Upon entering the first set of doors, officers at the desk must release you through another set of doors and into the small lobby area. To the average visitor, you would not know where to begin as the doors are not labeled from the lobby. After admittance through the proper door, a narrow hallway yields way to an open room full of dispatchers and call-takers lined in rows. The center supports 22 call-taking positions (18 MPD, 4 fire/EMS); 26 dispatch positions (18 MPD, 8 fire/EMS); and 6 supervisory/watch commander positions (5 MPD, 1 fire/EMS).

First seen after entering from the lobby are the MPD supervisors and then the dispatchers. Each district position (1D, 2D, 3D, etc.) has a primary dispatch position and an assistant position (on my visit, some districts only had a primary dispatcher). Dispatchers sit in clusters organized by their regional operations commands, ROC-North (2D and 4D), ROC-Central (1D, 3D and 5D), and ROC-East (6D and 7D). Most dispatch positions feature three monitors -- one each for CAD, mapping, and the radio system.

Dispatchers and call-takers are ready for each and every call with their Watson furniture specially designed for 9-1-1 centers. Counter tops and consoles rest on adjustable risers so personnel have the option of sitting in "air chairs" or standing. Foot humps permit users to rest their feet on the ground or at an angle while sitting.

An Intergraph Windows NT-based CAD system interfaces directly with mapping software with data purportedly supplied by the Naval District of Washington.

Dictaphone's Freedom Enterprise Recording System allows users to easily review the last 20 minutes and can supposedly retrieve online recordings stored from the past two years.

The Motorola Centracom Elite radio consoles are graphical-user computer interfaces that display the channels selected by the dispatcher. Each channel appears in its own sub-window with pertinent information such as transmit/receive status, volume level, and a "show PTT ID" option that displays the PTT (press-to-talk) user ID when an officer keys a radio that has the "signaling" option enabled. No big surprises, but here are the channels the MPD supervisor console may access. The display actually indicates the FCC-assigned call sign.

MPD Supervisor PSCC Console Channels:
460.350 KLG604 1D DISP
460.250 KLG610 2D DISP
460.025 KLG617 3D DISP
460.500 KLG614 4D DISP
460.200 KLG616 5D DISP
460.150 KLG609 6D DISP
460.475 KLG603 7D DISP
460.325 KLG615 METRO (tunnel version of Citywide)
158.790 KRJ859 ISB (Investigative Services Bureau)
460.325 KLG615 CW (Citywide)
158.850 KLG608 CID (Criminal Investigations Division)
460.275 KLG611 SOD (Special Operations Division)
LINE 01 and 02 (phone lines used for patching)
460.100 KLG605 TAC1
460.400 KLG613 TAC2

460.450 KLG607 TAC3
866.3625 PMARS
460.425 KLG606 COMM (Command channel)

In the middle of the large room are the MPD call-takers. All 9-1-1 calls are initially received by them, then may be transferred to the appropriate agency such as U.S. Park, White House, U.S. Capitol, Metro Transit, DC Fire/EMS, etc. Instead of transferring the fire or EMS calls across town, the transfer is literally across the room, and the uniform CAD system makes it especially easy for calls that require both agencies.

A Windows NT-based Vesta phone system and automatic call distributor (ACD) directs calls to an available call-taker and transfers them if necessary to one of the other emergency agencies, AT&T Language Line Services for foreign callers, or to poison control. A special feature automatically identifies TDD (telecommunications device for the deaf) callers and allows the call-takers to communicate directly with them using the same system. Plantronics headsets are standard throughout the facility.

Also in the middle of the room, on the walls above the call-takers, LED screens display the number of call-takers online, and the number of calls pending by queue: non-emergency (727-1010), 3-1-1, 9-1-1 and cellular. In addition, call-takers' supervisors sit on a platform off to the left side in the middle of the room.

Continuing through the room from the lobby, the next set of rows include fire/medical call-takers. They have the same equipment as MPD call-takers, however, their training is different. They are certified EMDs (emergency medical dispatchers) through Medical Priority Consultants. They are always the second point of contact as they would not receive an initial 9-1-1 call; their calls are transferred from the MPD call-takers.

At the far end of the room are the fire/EMS dispatchers. Sitting in a "pod" and appear huddled together, each has the same equipment as the MPD dispatchers, but their radio consoles mostly access digital trunked system talkgroups. The fire/EMS radio consoles feature the department's standard trunked system line-up, with a few conventional channels such as the former VHF channels used by the department. Also included is a specially designed radio patch that connects to the Naval District of Washington's FD EDACS trunked radio system, and a private-call feature that allows the console operator to chat directly with another trunked radio user.

Each fire/EMS dispatcher has an assigned function for a period of time before rotating a couple of times each shi One person is the dedicated primary dispatcher, another handles all fireground radio traffic, while two others coo dinate EMS radio traffic and backup their counterparts during peak periods. The fire/EMS supervisor sits on a platform overseeing the team from the right side.

Fire/EMS dispatchers are employed by DC Fire/EMS and have their own training, especially for EMD. Their shifts are: two 12-hour day shifts (0700-1900), followed by two 12-hour night shifts (1900-0700), and four days off.

By contrast, MPD dispatchers and call-takers work eight-hour shifts, five days per week -- 0700-1500, 1500-2300, 2300-0700 -- after a 15-30 minute roll call. After completing an in-house training course, new employees begin as call-takers, then proceed to dispatcher, advancing to senior dispatcher, and then training instructor, to supervisor. I am told overtime is plentiful for both agencies.

Many workers to whom I spoke are grateful for the new facility and the work environment has so far been pleasant. All personnel share a full kitchen, break room, and quiet room, where personnel can take a quick "time out" on their own in a quiet setting. As far as activities during slow periods, I did not notice a radio or television in the communications center for all to enjoy, however there is adequate lighting to read a book. Moreover, each console has its own adjustable "black light."

As the communications center occupies a large space, offices of officials associated with PSCC are off the outer hallways. Lower levels house the quiet room, MPD's roll-call room, and a room reserved as a fitness area (where there is one treadmill), and MPD's Teleserv unit, also known as "TRUe" or Telephone Reporting Unit. TRU is staffed by police officers who take criminal and late re-

ports over the phone in lieu of dispatching and committing an officer to take a report.

It's taken about 15 years to merge the dispatch functions for the police and fire/EMS into this facility. Officials attending the event stated that they still plan to eventually move to an even larger dispatch facility, dubbed the "unified call center," to be built in a couple years on the grounds of Saint Elizabeth's. That center could conceivably include call centers for police, fire/EMS and other city agencies such as human services, public works, city protective services, emergency management, etc.

After seeing this immaculate work environment which does contain some state-of-the-art equipment, I would like to view the old center on Indiana Avenue. Let me go now to contact the deputy mayor to arrange a tour of that facility!

UNIVERSITY OF MARYLAND GOES TRUNKED!

University of Maryland's College Park campus is migrating to a five-channel 800 MHz trunked radio system. As of late July, campus police radios have not been installed, says Robert Shearman, but they have been installed in shuttle buses. The target date to have the system fully operational is sometime during August, with time left for testing before the fall semester starts.

The system's transmit site is on the Hornbake Library. The system is supposed to be Astro (digital) capable. We have yet to learn which users will be using analog or digital talkgroups. Analog Motorola MCS2000 radios have been installed in the shuttle buses. Frequencies license under call sign WPRV422 are: 866.4125, 867.6625, 868.4125, 868.5375 and 868.9875. The campus also has a license pending for the five 800 MHz mutual aid channels: 866.0125, 866.5125, 867.0125, 867.5125 and 868.0125. Campus police already use the new police mutual aid channel, 866.3625.

UNIFIED MARYLAND EASTERN SHORE CONSORTIUM

So far, Queen Anne's and Talbot counties have transferred their primary fire/EMS and sheriff communication to the joint 800 MHz trunked radio system. The "Unified Maryland Eastern Shore Consortium," as it is called, only has the two county participants. But Caroline County has expressed interest in joining the system in a year or so. Dorchester County has also been toying with the idea of participating. Kent County declined the option and decide to install a narrow-band VHF system (fire/EMS frequencies below).

The Consortium system is a mix of analog and digital talkgroups. Fire/EMS and sheriff are digital and other users -- County Ride, animal control, school buses, maintenance, etc., are analog. Talkgroups 24592 (6010 in hex) and above are digital. County Ride leads as the most active talkgroup, followed by the county sheriff dispatch talkgroups.

So far the system uses these seven channels: 866.5875, 866.8, 866.9875, 867.575, 868.425, 868.675 and 868.9875. 866.9875 and 866.8 are the most active. Four channels are pending for use, they are: 866.7, 866.975, 868.475 and 868.525

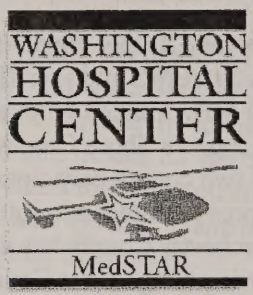
Queen Anne's County abandoned its two 46 MHz fire channels. Dispatching and the main fire/EMS talkgroup is heard now on 151.085. Also try 151.13, the former public works channel, for possible activity.

Kent County Fire/EMS (VHF narrow channels)
154.1975r Ch. 1 Dispatch
155.1675r Ch. 2 Fireground
154.2425r Ch. 3 Queen Anne's County Patch

ANDREWS AFB CONTEMPLATES DIGITAL TRUNKED SYSTEM

Vendor selection is a way off, but Andrews Air Force Base is considering a switch to a narrow-band (digital) trunked radio system by 2005. The system would likely incorporate Bolling Air Force Base as well as Andrews Air Force Base's two off-base remote sites. Thanks to Scott Glazer for that update.

MEDSTAR HELICOPTER UPDATE



MedSTAR has expanded its medevac services to four helicopters during the past few months, and we have these updates thanks to MedSTAR's Jim Burke. One MedSTAR helicopter is generally used as a backup aircraft while the other three are in service. Helicopters identify now by base location since the aircraft are shuffled around for maintenance. All MedSTAR helicopters and ambulances use 462.95 simplex [77.0].

Tail numbers:
N39181 - BK-117 (1983)
N39188 - BK-117 (1984)
N135MH - EC-135 (2000)
N136MH - EC-135 (2001)

MedSTAR Helicopter/Ambulance Designations:
MedSTAR 1 - Frederick Airport (formerly based at Washington Hospital Center)
MedSTAR 2 - Maryland Airport (Indian Head)
MedSTAR 3 - Easton Airport
MedSTAR 4 - Ambulance
MedSTAR 5 - Ambulance (backup)

Sometimes a spare helicopter in transit will use "MedSTAR 5" as a call sign since the "MedSTAR 5" ambulance is infrequently used.

"W" SECTOR COMING THIS FALL TO PGPD, AND OTHER NEWS

The Prince George's County Police Department is planning to start an 11th police sector this September. The "W" (William) sector will be in the southern part of the county, and will cover parts of "F" and "J" sectors. This includes Accokeek, Tantallon and portions of Brandywine. According to the plan, each station will give up 10 officers (in effect, a squad) to the new sector. As of this writing, sector headquarters location and channel assignment have not been finalized.

The new District 4 (Oxon Hill) police station is open at 5135 Indian Head Highway in the Eastover Shopping Center. The sign out front reads "Eastover Police Station," though we are assured it is a county police district station!

The $40 million needed to fund the county's proposed public safety trunked radio system project was reportedly rejected by the county council. The county intends to retain its 800 MHz channels and its two sparsely used five-channel EDACS systems, which are used by a few county police speciality units, the county's central services and a handful of local government users.

The department's Sierra Wireless mobile data modems have been suffering a few bugs. They perform fine for a while (a week or so) and suddenly a message appears that Windows is unable to locate the modem. Airinc, the company that installs them, tells officers to simply open the trunk and unplug the modem from power, then plug it back in again! Hopefully a patch will be found by the time you read this.

The department still has no idea when the CAD interface will be in place so county officers can get case numbers and dispatches over the mobile data computers. There is no plan, right now, for a direct connection with the county sheriff's warrant computer. The plan is that, every night, the police department's server will download the open-warrant data, which officers will then query the next day. Any hits will have to be verified with the dispatcher. There is no plan for a live feed between the two agencies, although we are told the MNCPPC (Maryland Park) police have such a connection to the sheriff's system.

THE END OF A LEGACY: Delaware to Leave 33.78 for Fire Dispatch

For more than 20 years scanner listeners only had to monitor a single frequency, 33.78, to hear fire/EMS dispatches throughout the state. Now each of the state's three counties are seeking their own dispatch channel. Low band is becoming obsolete, says Joseph Thomas, Sussex County EOC director. He noted that radio manufacturers are not making low-band products as they once had, and it is not practical for the county to continue using it.

Early this year, Sussex County switched to 453.7 as it's primary fire/EMS alerting channel. 453.7 is used carrier squelch except for Rehoboth Beach which uses DCS 023. Sussex dispatches the call using one of its five tower sites that is nearest the incident. Eventually the county plans to simulcast the dispatches over all five towers. The towers are located in Cedar Creek Hundred (near Ellendale), Georgetown, Gumboro Hundred, Indian River Hundred (Angola) and Seaford. The county council funded 50 pagers for each fire company, and some have purchased more with their own money.

Each Sussex County fire/EMS company is also licensed on a unique "company channel" that may function as a standalone repeater and/or may rebroadcast 800 MHz digital talkgroups selected by the individual department. For an updated list of these company channels, or for shore frequency info, contact Alan or visit http://henney.com/chm

Kent County (Delaware) is in the process of moving its dispatching to 151.4 MHz (123.0 Hz). Transmit sites are in Smyrna, at the state police headquarters and the Lake Forest High School in Felton. The county also purchased 50 pagers for each fire company. As soon as the pagers are distributed, 151.4 will be in full service.

New Castle County is considering a move as well although no frequency decisions have reportedly been made as of yet.

NEWSSCAN

HOWARD COUNTY TOWER TROUBLES. Sen. Barbara A. Mikulski has been asked to urge the FCC to act quickly on Howard County's application for a permit to build a 340-foot emergency communications tower in Ellicott City. The state plans to build the tower and share it with the county. The tower would be part of the county's new 800 MHz communications network. Some residents, says the June 26 Baltimore Sun, oppose construction of the tower next to the state's District Court building because it would be visible within the county seat's historic district. Critics contend it should be built farther from the historic district.

Preservationists filed a complaint with the FCC in June requesting an extension to comment on a public document that they say officials withheld from them. The state had planned to finish building the structure in March and wanted more than a year to test and correct any problems with the communications equipment. The county's newest emergency communications tower is a 400-footer in Savage that was completed in June at a cost of $800,000. Towers are to be installed in Woodstock and Ellicott City. The county is adding a total of five new towers for its 800 MHz system which will consist of nine towers. They hope to have the system running by late next year.

TOWER PLANNED FOR EMMITSBURG, MD. Residents discovered that they may have little recourse against a state project to build a 340-foot-tall communications tower. As part of a project to install a statewide 700 MHz emergency communications system, and upgrade Frederick County's system at the same time, the State Highway Administration is allowing the tower to be built on Bridgeport Road land that currently houses a salt dome. The tower, reports the July 3 Frederick News-Post, will be a three-legged, self-supporting, lattice-style tower that will ultimately support antennas for county, state, federal and local emergency communications.

The tower will join a network of five or so other locations in the county that will be interconnected using high-capacity microwave circuits. That network will be a part of Maryland's statewide 700 MHz emergency communications system sometime around 2006. The state seeks such partnerships with local governments to construct this network of radio towers which will create needed infrastructure for the state's 700 MHz system, while allowing local governments and state agencies to use them now.

Other proposed sites include Frederick Municipal Airport, Brunswick, Mar-Lou Ridge, Mount Airy and Gambrill. The Emmitsburg site purportedly offers the best possible reach of signals without costing the county or state any money for rent on established towers or forc-

ing them to buy or rent land. Maryland State Police, Maryland Institute for EMS Systems, DNR and the county's emergency communications are planning to participate. Tower construction is scheduled to begin this fall.

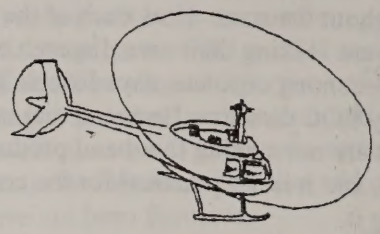
FAUQUIER COUNTY NEGOTIATES RADIO SYSTEMS. In a 3-2 vote during June, Fauquier County supervisors decided to begin contract negotiations for an 800 MHz trunked radio system. The June 21 Fauquier Citizen Web page reports that the county shelved consideration of an alternative 150 MHz system until September.

Motorola and M/A-Com (formerly ComNet Ericsson) submitted bids on building the 800 MHz system. The board will keep those bid prices secret during contract negotiations. But cost estimates received by the county for an 800 MHz system have ranged from $8 million to $12 million.

One county supervisor argued that a 150 MHz trunked simulcast system left too many technical problems unanswered, suggesting that there is no similar 150 MHz simulcast trunked system in use in the public safety arena. Virginia is developing such a system. A six-member team of county officials and consultants will negotiate the 800 MHz system contract later this summer. In an investigative editorial, Jim Borland challenges the idea that the 150 MHz band is unsuitable and stresses that a trunked system is overkill, and a conventional 150 MHz system would cost a fraction of the price of an 800 MHz system. Related information can be found at: http://www.fauquiernews.com

NEW HELICOPTERS FOR BALTIMORE. Baltimore police helicopters returned to the city's skies in July for the first time since a 1998 fatal crash grounded the unit. The city's new police helicopters, states the July 3 Baltimore Sun, are the sleek black $1.4 million Canadian-built American Eurocopter EC-120s. The department says each EC-120 will be outfitted with cameras with infrared and zoom lenses. And by year's end, images from the cameras will be able to be beamed to commanders on the ground. The copters also will have equipment that can pinpoint the locations of stolen vehicles.

Two EC-120s arrived in July and two more are expected by September. The helicopters, which can carry up to five people, will eventually fly between 9 a.m. and 2 a. m. The helicopters can fly about 145 m.p.h. and stay airborne for about three or four hours. The city estimates the helicopters will cost about $1.3 million a year to maintain. The helicopters identify as "Foxtrot" and often chat on 123.025 with state police Trooper helicopters. Tail numbers are N452F and possibly N453F.



DELAWARE PROBLEMS CONTINUE. A firefighter in Claymont, Delaware was trapped in a basement and could not radio for assistance because the state's trunked system was not working. State representatives, stated a June WCAU-TV newscast, say it's an ongoing problem since the 800 MHz system became operational in February 1997. There have been close to 1,000 complaints of user problems from emergency workers across the state.

State representatives say the Claymont problem was caused by a faulty circuit breaker at the local tower. The governor has ordered immediate negotiations on a contract for equipment upgrades instead of a lengthy bid process. The June 22 Newark Post said an independent consultant's report, requested by a house committee in January 2000 and completed in March 2001, recommended equipment and antenna location additions to improve coverage in Claymont, Hartly and Rehoboth (additional testing resumed in Rehoboth Beach in late July).

TEEN HACKS DENVER TRUNKED SYSTEM. A 16-year-old boy using a hand-held radio and a computer allegedly sent Denver police on fake emergencies for more than a month before getting caught. The May 11 *Rocky Mountain News* reported that the teen managed to hack into the department's computer-controlled radio system, program his radio to transmit on the department's frequency from his Southwest Denver home and then took on the alias of Jerry Martinez, a fictitious Denver police officer. He made radio contact with a police dispatcher more than a dozen times from March to May.

Finally, dispatchers kept him on the radio for 90 minutes when he requested several tag checks while an FCC agent used special equipment to track the broadcast back to the teen's house during the conversation. The agent

spotted the teen standing in his front yard, talking into a radio. The FCC confiscated nine radios from the home. The next day, a police informant called the teen and asked him to reprogram the informant's radio so he could listen to Denver police and transmit on their frequency, and was later arrested. Police found a computer and other radio equipment in the basement of his grandmother's house.

Police claim they have not determined how the teen allegedly hacked into the radio system. The police department's emergency radio system, states the article, uses "two sets of security identification codes and a computer to prevent unauthorized access."

Ron Chalk, Kevin Inscoe, Jack McCartan, Ron Perron and Bob Pugh contributed to this issue's NewsScan.

###

Please address all correspondence to Alan. We encourage readers to submit material and write articles that relate to the hobby. All submissions are subject to editing for style and content. When submitting material please make certain we can contact you should we have any questions. We welcome frequency and visitor requests, but please include a reply envelope.

Contact: Alan Henney
6912 Prince George's Avenue
Takoma Park, MD 20912-5414
301-270-2531 (voice) / 301-270-5774 (fax)

Newsletter Staff:
Alan Henney, Editor & Treasurer
(alan@henney.com)
Dr. Willard Hardman, Executive Editor
(hardman1@ix.netcom.com)
Mike Peyton, Technical Advisor
(Michael.Peyton@wcom.com)
Ken Fowler, Northern Virginia Correspondent
(KD4IIW@Juno.com)

The Capitol Hill Monitor is the non-profit newsletter of the *Capitol Hill Monitors*. The newsletter keeps scanner enthusiasts abreast of local meetings, frequency profiles and other topics of interest. Dues are $10 and include 12 issues (back issues cost $1 each). Kindly make checks payable to Alan Henney. Membership will be prorated accordingly in the event of a postage increase.

Join Local Scanner Enthusiasts On-Line!
We encourage computer users to take part in discussions on Frank Carson's Open Channel computer BBS (301-203-8478) or subscribe to the Scan-DC listserv by sending an e-mail to majordomo@qth.net with the words "subscribe scan-dc" (no quotes) as the message.

The Capitol Hill Monitor

6912 Prince Georges Avenue
Takoma Park, MD 20912

[redacted]

19971=2114